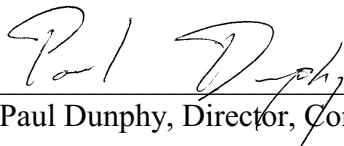




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Item No. 3
Halifax Regional Council
July 6, 2010

TO: Mayor Kelly and Members of Halifax Regional Council

SUBMITTED BY: 
Paul Dunphy, Director, Community Development

DATE: June 15, 2010

SUBJECT: Halifax Wastewater Treatment Plant Capacity

INFORMATION REPORT

ORIGIN

April 20, 2010 (Item 9.2, Case 01205) Motion of Regional Council for report on the capacity of the Halifax Treatment Plant and the design and capacity for the build out and development for future years.

BACKGROUND

The Halifax Harbour Wastewater Treatment Plant (HHWTP) was constructed as part of the Harbour Solutions Project and is in the re-commissioning stage after the recovery from flood damage in January, 2009. The plant was designed to initially accommodate a total of 139,000 persons with a future upgrade resulting in the accommodation of a total population of 163,000.

Two issues were raised during the Public Hearing for Case 01205: Municipal Planning Strategy and Land Use By-law Amendment for a Development Agreement, 50 Bedford Highway. These were:

- The capacity of the HHWTP and its ability to accommodate future growth and development build out.
- The acceptability of effluent from sites off the peninsula to be directed to the HHWTP.

DISCUSSION

The design of the Halifax plant incorporated all tributary lands within the sewershed. This includes lands which drain naturally towards the plant irrespective of current community or previous political boundaries. The design of the plant also includes the growth anticipated within the 25 year time frame of the Regional Plan. The proposed development at 50 Bedford Highway is included in the anticipated population growth from the Regional Plan.

The acceptance of effluent from other areas is not unique to the HHWTP. All of the large wastewater treatment plants within HRM accept effluent from areas outside their host communities.

By having a regional wastewater system, HRM and Halifax Water gain flexibility in being able to transfer wastewater between plants maximizing our capital investments and eliminating the need to invest capital funding on premature upgrades. Overall, this regional approach ensures a more efficient use of our wastewater infrastructure.

In addition, there are also technical reasons which support a regional approach to wastewater treatment. In order to meet regulatory requirements, locations around the harbour tend to be more practical and feasible for wastewater treatment plants and the topography of the areas being serviced by the plants generally drains towards these locations.

The following information was presented to Regional Council on June 17, 2008 in support of Case 01148 Amendments to the Bedford West Secondary Planning Strategy and Regional Subdivision By-law. The table has been updated to reflect current capacities and anticipated development within the present sewershed. It indicates that the Halifax Plant has more than sufficient capacity for all proposed development anticipated under the Regional Plan within the sewershed and the transfer of flows from the Beechville, Lakeside, Timberlea (BLT) sewershed.

Description	Population (persons)
Initial Plant Capacity	139,000
Current Flows (updated to reflect 2010)	110,170
Current Remaining Capacity	28,830
Future Upgrade	24,000
Overall Remaining Capacity	52,830
Less Proposed Transfer from BLT sewershed	10,500
Less Regional Planning Growth Forecasts	25,430
Overall Remaining Capacity (after 25 yr build out of Regional Plan)	16,900

The design of the HHWTP is such that full construction is completed in two phases. The initial capacity within the plant will be supplemented by the future upgrade. This two phase approach is done so the plant is not initially overbuilt creating a plant in which capacity is initially under utilized. Essentially, capacity will be created when it is needed. From a financial perspective, this approach means that capital investment in the plant occurs when it is needed, not prematurely.

In addition, Halifax Water has begun the Regional Wastewater Functional Plan which will review and upgrade the capacity calculations for all of the wastewater treatment facilities and their associated collection systems. A significant benefit of this plan will be an understanding of efficiencies that can be gained through a regional approach to the manage of waste. This analysis will incorporate the proposed growth areas identified in the Regional Plan and provide solid technical information to assist staff and Regional Council in the assessment of development proposals.

BUDGET IMPLICATIONS

There are no budget implications.

FINANCIAL MANAGEMENT POLICIES/BUSINESS PLAN

This report complies with the Municipality's Multi-Year Financial Strategy, the approved Operating, Project and Reserve budgets, policies and procedures regarding withdrawals from the utilization of Project and Operating reserves, as well as any relevant legislation.

COMMUNITY ENGAGEMENT

There is no specific community engagement associated with the design of the treatment plant. However, extensive community engagement occurred through the completion of the Regional Plan which aided in the determination of the growth areas and planning applications associated with development within the growth areas will involve public consultation.

ATTACHMENTS

None

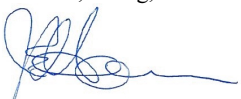
A copy of this report can be obtained online at <http://www.halifax.ca/council/agendasc/cagenda.html> then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 490-4210, or Fax 490-4208.

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